

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|----------------|----------------------|-------------------------|------------------|
| 09/767,016 | 01/22/2001 | Y. Brian Chen | VIA-001 | 1476 |
| 7812 73 | 590 06/16/2005 | | EXAMINER | |
| SMITH-HILL AND BEDELL, P.C. 16100 NW CORNELL ROAD, SUITE 220 | | | WAHBA, ANDREW W | |
| BEAVERTON, OR 97006 | | 3 220 | ART UNIT | PAPER NUMBER |
| | | | 2661 | |
| | | | DATE MAILED: 06/16/2005 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| , | | | 1/10 | | | |
|---|--|---|------|--|--|--|
| | Application No. | Applicant(s) | _ | | | |
| | 09/767,016 | CHEN, Y. BRIAN | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Andrew W Wahba | 2661 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet w | ith the correspondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a within the statutory minimum of thi vill apply and will expire SIX (6) MOI cause the application to become A | reply be timely filed ty (30) days will be considered timely. YTHS from the mailing date of this communication BANDONED (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1)⊠ Responsive to communication(s) filed on 22 Ja | anuary 2001. | V. | • | | | |
| | action is non-final. | ~~ | | | | |
| 3) Since this application is in condition for allowar | ince this application is in condition for allowance except for formal matters, prosecution as to the ments is | | | | | |
| closed in accordance with the practice under E | x parte Quayle, 1935 C. | D. 11, 453 O.G. 213. | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) Claim(s) is/are allowed. 6) Claim(s) 1-14 and 17-20 is/are rejected. 7) Claim(s) 15, 16 is/are objected to. 8) Claim(s) are subject to restriction and/or | vn from consideration. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examine | r. | | | | | |
| 10)⊠ The drawing(s) filed on <u>01/20/2001</u> is/are: a)□ accepted or b)□ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correct | , | • | I). | | | |
| 11)☐ The oath or declaration is objected to by the Ex | aminer. Note the attache | a Office Action or form P1O-152. | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori | s have been received. s have been received in A rity documents have beer u (PCT Rule 17.2(a)). | Application No received in this National Stage | | | | |
| Attachment(s) | _ | | | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>05/23/01</u>. | _ Paper No | Summary (PTO-413) s)/Mail Date informal Patent Application (PTO-152) | | | | |

Art Unit: 2661

DETAILED ACTION

Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 5, 6, 8 and 18 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 8 and 18, applicant claims "digital subscriber line coupled to a POTS line" (claim 8, line 2) and "coupling the digital subscriber line to a POTS line" (claim 18, line 2). The manner in which a digital subscriber line is coupled to a POTS line is not clear. The term "coupling" does not describe the manner in which digital subscriber line may employ a POTS line to transmit data. Also, only one term may be employed to refer to a claimed element.

In claim 5, applicant claims "second plurality of line cards" (lines 4-5), but the applicant does not refer to a first plurality of line cards in either claim 5, or claim 1.

Likewise, the applicant refers to "a third plurality of digital subscriber lines" (line 5-6), but does not refer first or second plurality of digital subscriber lines in either claim 5, or claim 1. Likewise, the applicant refers to "a third plurality of customer premises equipment" (line 7-8), but does not refer first or second plurality of customer premises equipment in either claim 5, or claim 1. Applicant is advised to correct similar problems that occur in the remained of claim 5.

Art Unit: 2661

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claim 1-4, 7-9, 11-14 and 17-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Brodigan (US Patent 6,160,810).

With regard to claims 1 and 11, Brodigan discloses a central office 12 (local switch) connected to an optical network unit 36 (optical network) and VDSL network interface device 34 (digital subscriber line). Brodigan discloses a subscriber 14 (customer premises equipment) (column 4, lines 16-18). The central office 12 communicates with the subscriber 14 via a virtual path identifier (VPI) and virtual channel identifier (VCI) (channel selection means) (column 4, lines 24-27). It is inherent that the VPI/VCI are transmitted from the subscriber 14 to the central office 12. The VPI/VCI are included in data packet headers. Accordingly, channels not identified by the VPI/VCI are not transmitted to the subscriber 14.

With regard to claims 2 and 12, subscriber 14 includes a CPE data device 42 that supports multiple ports 46, 60, 62 and 64 (four different channels) each of which has a

Art Unit: 2661

permanent virtual circuit (transmitting simultaneously) for transmission with the central office 12 (column 6, lines 28-37).

With regard to claims 3 and 13, Brodigan discloses a central office 12 connected to an optical network unit 36 (optical network) (column 4, lines 16-18). Brodigan does not specifically disclose the data rate supported by the optical network unit 36, but it may be either OC-3 or OC-12 depended on the data rate required.

With regard to claims 4 and 14, Brodigan discloses an HDT 22 that supports up to 64 ONUs, where each ONU supports up to drops (column 4, lines 19-23). As a result, Brodigan supports more than 160 DSL lines.

With regard to claims 7 and 17, Brodigan discloses a central office 12 (local switch) connected to an optical network unit 36 (optical network) (column 4, lines 16-18). The central office is also connected to data service providers 16, 18 and 20 (Internet) (column 4, lines 40-44). Brodigan discloses that the data service providers 16, 18, and 20 are connected to PC 48 (personal computer) via subscriber 14 (customer premises equipment) (column 4, lines 45-50).

With regard to claims 8 and 18, subscriber 14 includes a CPE data device 42 that supports multiple ports 46, 60, 62 and 64 (means for splitting) each of which has a permanent virtual circuit for transmission with the central office 12 (column 6, lines 28-37). The subscriber 14 is connected to a DSL line.

With regard to claims 9 and 19, the DSL line can be used to communicate voice, data or video. In the event that voice is being transmitted, a headset can be employed.

Application/Control Number: 09/767,016

Art Unit: 2661

Claim Rejections - 35 USC § 103

Page 5

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brodigan (US Patent 6,160,810) in view of Vialen et al (US Patent 6,606,310).

Brodigan does not teach or fairly suggest that the local switch is remotely configurable via SNMP commands.

Vialen et al discloses an Interim Local Management Interface (ILMI) that employs SNMP protocol to remotely monitor and control ATM switches (local switch) and ATM terminals (customer premises equipment) (column 6, lines 40-48).

A person of ordinary skill in the art would have been motivated to employ Vialen et al in Brodigan to change any parameters of either the local switch or customer premises equipment. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Brodigan and Vialen et al so as to obtain the invention as specified in claims 10 and 20.

Allowable Subject Matter

7. Claims 15 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Application/Control Number: 09/767,016

Art Unit: 2661

Page 6

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew W Wahba whose telephone number is (571) 272-3081. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew Wahba

August 27, 2004

CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Const. Norm